
V. REMARKS

The Examiner indicates that drawing Figure 5 should be designated by a legend such as -- Prior Art -- . The attached Replacement Sheet(s) of drawing figures includes changes to Fig. 5 by including the legend "Prior Art".

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph. The claims are amended to obviate the rejection. Withdrawal of the rejection is respectfully requested.

I. INTRODUCTION TO SUBSTANTIVE REJECTIONS

The Office Action regards the "rectifying vanes" in claim 4 as being disclosed in such as Fig. 5 (#63) of Babcock (U.S. Patent No. 2,252,684), Fig. 1 (#12) of Japan 62-85009 and Fig. 1 (#26) of Broaddus et al. (U.S. Patent No. 4,712,988). However, the member 63 of Babcock is a screen (p. 2, line 63), the member 12 of Japan 009 is a conical porous dispersion plate, namely a plate formed with a large number of holes (p. 2, top-right column, lines 19-20), and the member 26 of Broaddus is a foraminous plate, namely a same porous plate as the member 12 of Japan 009.

In addition, the screen and the porous plate of the above cited references are not of a structure and/or arrangement satisfying the features recited in claim 4 that pleural rectifying vanes are arranged on an inner wall of the cylindrical flow guide to extend radially toward the center of the cylindrical filter and at intervals in the circumferential direction of the inner wall.

Thus, with the screen and the porous plate of the cited references, it is impossible to bring about the result attainable according to the claimed invention that the cooling water entering the cylindrical flow guide 26 can be suppressed from undergoing swirling, so that no disturbance can be imparted to the large number of filaments f (see specification, p. 7, [0027]).

II. SUBSTANTIVE REJECTIONS

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by Hagiwara (Japan 55-93 816). The rejection is respectfully traversed.

Hagiwara teaches a device for the production of extremely fine polyester fiber.

Claim 1 is directed to a melt spinning apparatus that includes a spinning unit disposing a spinning plate having a plurality of nozzles and a cooling device disposed below the spinning plate. Claim 1 recites that the nozzles of the spinning plate are arranged annular in at least one circle and a cylindrical filter is disposed at an exit of a cooling wind in the cooling device so as to enclose around a spun yarn discharged from the spinning plate with the annular diameter of the at least one circle being from no less than 0.6 times to one time of the internal diameter of the cylindrical filter and the flow velocity of the cooling wind blown from the cylindrical filter being distributed gradually higher according to the downstream of the spun yarn. Furthermore, claim 1 recites that a plurality of rectifying vanes are arranged on an inner wall of the cylindrical flow guide to extend radially toward the center of the cylindrical filter and at intervals in the circumferential direction on the inner wall.

It is respectfully submitted that the rejection is improper because the applied art fails to teach each element of claim 1. Specifically, the applied art fails to teach a plurality of rectifying vanes that are arranged on an inner wall of the cylindrical flow guide to extend radially toward the center of the cylindrical filter and at intervals in the circumferential direction on the inner wall.

As a result, it is respectfully submitted that claim 1 is allowable over the applied art.

Claim 2 depends from claim 1 and includes all of the features of claim 1. Thus, it is respectfully submitted that claim 2 is allowable at least for the reason claim 1 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as unpatentable over Hagiwara in view of Babcock (U.S. Patent No. 2,252,684). The rejection is respectfully traversed.

Babcock teaches an apparatus for spinning molten filament-forming compositions for the production of filaments, yarns, ribbons and the like.

Claims 3 and 5 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Claim 4 is canceled and therefore the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as unpatentable over Hagiwara in view of Hiroki et al. (Japan 62-085009). The rejection is respectfully traversed.

Hiroki teaches a quenching apparatus for extruded yarn.

Claims 3 and 5 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Claim 4 is canceled and therefore the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as unpatentable over Hagiwara in view of Lenk (U.S. Patent No. 4,681,522). The rejection is respectfully traversed.

Lenk teaches a melt spinning apparatus.

Claims 3 and 5 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Claim 4 is canceled and therefore the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as unpatentable over Hagiwara in view of Japan 8-218217. The Examiner believes that all of the features of these claims are either taught or suggested in the combination of these references.

Japan 217 teaches a yarn cooling device for providing optimum cooling air.

Claims 3 and 5 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

Claim 4 is rejected under 35 U.S.C. 103(a) as unpatentable over Hagiwara in view of the either Lenk or Japan 217 and further in view of Broaddus (U.S. Patent No. 4,712,988). The rejection is respectfully traversed.

Broaddus teaches an apparatus for quenching melt spun filaments.

Claim 4 is canceled and therefore the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

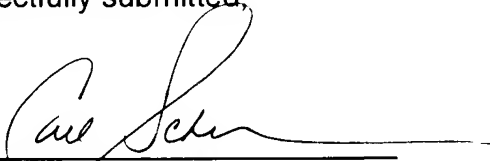
In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

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Enclosure(s): Petition for Extension of Time (one month)
One (1) sheet of Replacement Drawings Fig. 5

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